

ABSTRACT

An object of the present invention is to make it possible to uniformly supply of a gas onto a base material in a way simpler and lower in cost, and thus, to realize a high-quality surface treatment. For that purpose, in surface treatment of a base material (12) by supplying a surface-treating gas on the surface of the base material (12) while conveying it in a particular direction, the peripheral surface of a rotor having a cylindrical peripheral surface (24) is made to face, via a gap (23), the surface of the base material (12) or an opposing member (20) formed at a position separated from the base material and the rotor is rotated around the axis in the direction almost perpendicular to the base material (12)-conveying direction, as the means for supplying the surface-treating gas. By the rotation, the surface-treating gas is dragged in by the peripheral surface of the rotor (24), guided into the gap (23), and then, fed from the gap (23) onto the surface of the base material (12).